

HAZARDS OF SOLVENTS

We use solvents practically every day in our lives. At work, we may use or be exposed to solvents when we come in contact with paints, coatings, while using dip tanks, thinners, degreasers, cleaners, glues or mastics. As a result of this widespread usage, it is important to know some of the hazards that are associated with the group of chemicals, generally called "solvents."

For practical purposes a solvent is simply a liquid capable of dissolving specific solids or liquids. As you know, there are solvents that we use daily that are hazardous. Petroleum based solvents are the most common type used in industry. Therefore, as part of your job, it's important for you to understand the hazards of working with or around solvents.

Exposure and over-exposure to a solvent can come from various methods. The routes of entry may include:

- Absorption by direct contact on the skin. If there are no "barriers" between the solvent and your skin, the solvent can be absorbed through your skin.
- Inhalation by breathing solvent vapors. Breathing in the solvent vapors can quickly result in the chemical getting into your body and bloodstream via your lungs.
- Ingestion from literally eating the chemical by not practicing good hygiene after handling solvents. Direct contact with your hands and mouth through eating or smoking may result in unexpected ingestion of solvents.
- Puncture of the skin by a tool or other object which has a coating of solvent. Punctures can result in the direct introduction of toxic chemicals into your body.

Overexposure to solvents can cause a variety of ailments. Depending on the type of solvent you are exposed to, the body will react in different ways. Skin contact may result in minor skin rashes or an allergic reaction resulting in "chloracne." This happens when the solvent dissolves the skin's natural oils. Some workers can develop a sensitization to a particular product or chemical. Sensitization results in the entire body being "overly" sensitive to a particular chemical or product. After sensitization has occurred, even a very slight exposure can result in adverse or serious reactions. Serious overexposures can lead to illnesses resulting in organ or tissue damage.

As with any chemical or product, important information is contained in the product's Material Safety Data Sheet (MSDS). The MSDS provides information on safe use, handling, disposal and protection methods among other information.

Solvents are very useful in our everyday lives. If we take the time to learn more about them, we can be better prepared to properly use them, protect ourselves and effectively get our job done.

If you are unsure of the solvent or product that you are using, ask questions or check the MSDS.